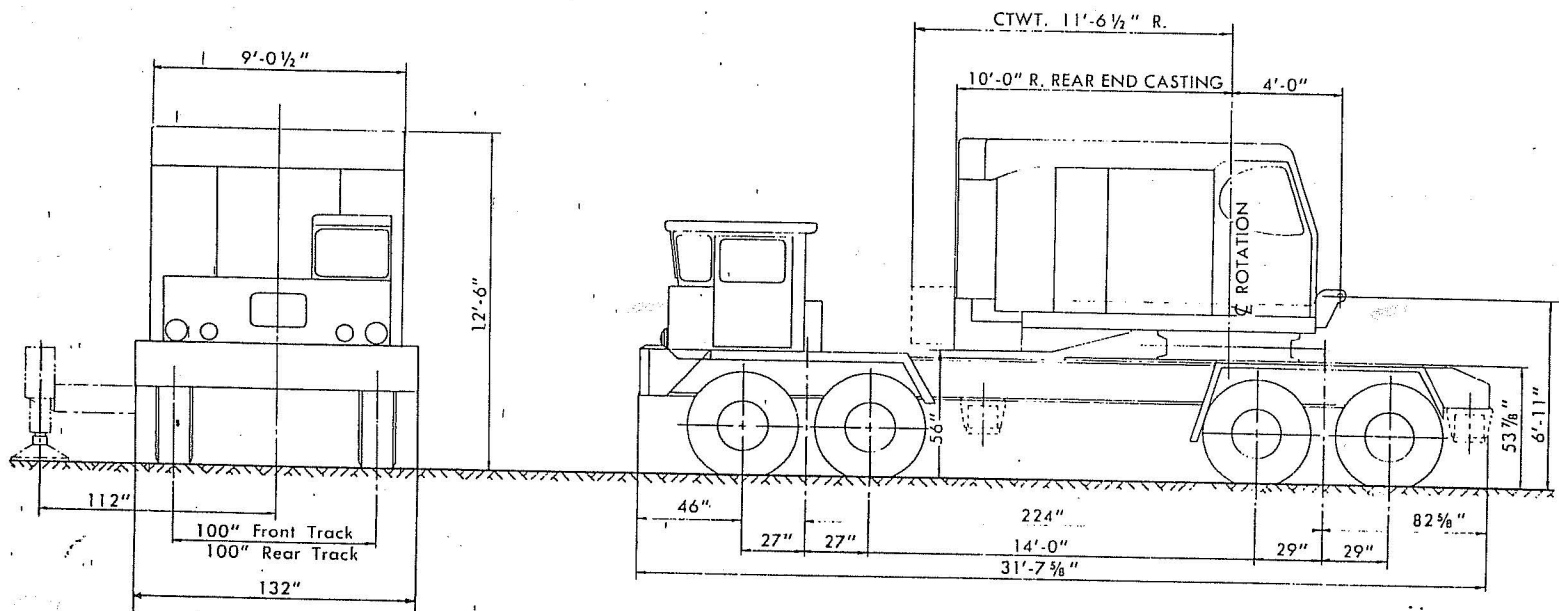


60-T

SERIES FOUR

60 TON TRUCK CRANE SPECIFICATIONS



CRANE

Hoisting, front drum, plain	17½ in.	P. Dia.
Hoist rope	¾ in.	Dia.
Hoisting, rear drum, grooved	18½ in.	P. Dia.
Hoist rope	¾ in.	Dia.
Boom point sheaves (3)	18½ in.	P. Dia.

CLAMSHELL

Closing drum, plain	17 1/2 in.	P. Dia.
Closing rope, 1-part	3/4 in.	Dia.
Holding drum, grooved	18 1/2 in.	P. Dia.
Holding rope, 1-part	3/4 in.	Dia.
Boom point sheaves (3)	18 in.	P. Dia.

DRAGLINE

Hoist drum, grooved	18½ in.	P. Dia.
Hoist rope	¾ in.	Dia.
Drag drum, grooved	17½ in.	P. Dia.
Drag rope	1 in.	Dia.
Tubular boom point sheaves (3)	18 in.	P. Dia.
Angle boom point sheave (1)	30 in.	P. Dia.

WEIGHTS IN POUNDS

	40 Ft. Angle or Tubular Boom		
	Crane	Dragline	Clamshell
Net domestic, approx.	100,900	101,200	100,950
Working, approx.	101,950	103,450	103,750
Export shipping, approx.	103,050	104,450	104,750
Ships option tons	133	135	136

Hook block and buckets included in working weight and export shipping weight, but not in domestic net weight.

POWER SPECIFICATIONS

Make Model Type	GM* 6-71 N Diesel	Caterpillar* 3306 T Diesel	Cummins N-855 P Diesel
Type of Drive	Tor. Conv.	Tor. Conv.	Tor. Conv.
Cylinders	6	6	6
Bore x stroke, inches	4¼ x 5	4¾ x 6	5½ x 6
Displacement, cu. in.	426	638	855
Net engine H.P. at governed speed	144	145	149
Governed speed	2000	2100	2000
Fuel tank capacity, gals.	70	70	70
Crankcase capacity, qts.	28	24	32
Cooling system capacity, gals.	11	12	21
Starting	12V-Elec.	12V-Elec.	12V-Elec.
Altitude Range, Feet	0-12,000	0-12,500	0-9,000

*TWO SPEED TRANSMISSIONS: (Optional — Instead of Tor. Conv.)

1) Overdrive Gear Box

2) Underdrive Gear Box

Ratios: 1:1 and 1:0.67

LINE PULLS AND SPEEDS

Drum Pitch Diameter (Inches)	Direct Drive 1.0 to 1.0		Overdrive 1.0 to 1.48		Underdrive 1.0 to 0.67	
	Pull In Lbs.	Speed F.P.M.	Pull In Lbs.	Speed F.P.M.	Pull In Lbs.	Speed F.P.M.
17½	23,300	154	15,700	228	34,600	104
18½	22,000	162	14,800	240	32,800	110

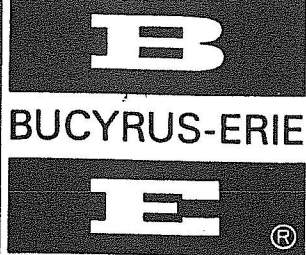
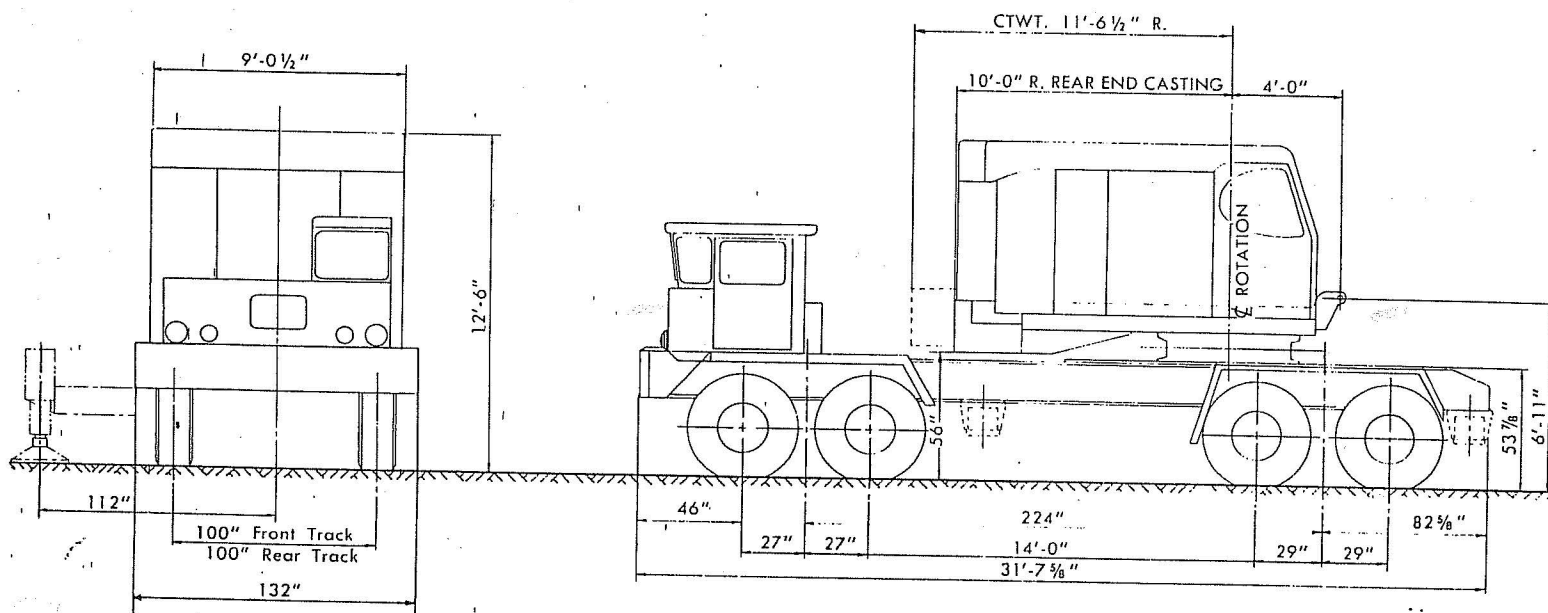
Swing Speed 3.9 R.P.M.

Direct Drive:

Speeds and pulls based on engine operating at full load speed; direct drive.

Torque Converter Drive:

When torque converter is operating at full stall, line pulls are approximately 240 percent of those shown for direct drive.

**60-T****SERIES FOUR****60 TON TRUCK CRANE SPECIFICATIONS****CRANE**

Hoisting, front drum, plain	17 1/2 in. P. Dia.
Hoist rope	7/8 in. Dia.
Hoisting, rear drum, grooved	18 1/2 in. P. Dia.
Hoist rope	3/4 in. Dia.
Boom point sheaves (3)	18 1/8 in. P. Dia.

CLAMSHELL

Closing drum, plain	17 1/2 in. P. Dia.
Closing rope, 1-part	3/4 in. Dia.
Holding drum, grooved	18 1/2 in. P. Dia.
Holding rope, 1-part	3/4 in. Dia.
Boom point sheaves (3)	18 in. P. Dia.

DRAGLINE

Hoist drum, grooved	18 1/2 in. P. Dia.
Hoist rope	3/4 in. Dia.
Drag drum, grooved	17 1/2 in. P. Dia.
Drag rope	1 in. Dia.
Tubular boom point sheaves (3)	18 in. P. Dia.
Angle boom point sheave (1)	30 in. P. Dia.

WEIGHTS IN POUNDS

	40 Ft. Angle or Tubular Boom		
	Crane	Dragline	Clamshell
Net domestic, approx.	100,900	101,200	100,950
Working, approx.	101,950	103,450	103,750
Export shipping, approx.	103,050	104,450	104,750
Ships option tons	133	135	136
Hook block and buckets included in working weight and export shipping weight, but not in domestic net weight.			

POWER SPECIFICATIONS

Make Model Type	GM* 6-71 N Diesel	Caterpillar* 3306 T Diesel	Cummins N-855 P Diesel
Type of Drive	Tor. Conv.	Tor. Conv.	Tor. Conv.
Cylinders	6	6	6
Bore x stroke, inches	4 1/4 x 5	4 3/4 x 6	5 1/2 x 6
Displacement, cu. in.	426	638	855
Net engine H.P.			
at governed speed	144	145	149
Governed speed	2000	2100	2000
Fuel tank capacity, gals.	70	70	70
Crankcase capacity, qts.	28	24	32
Cooling system capacity, gals.	11	12	21
Starting	12V-Elec.	12V-Elec.	12V-Elec.
Altitude Range, Feet	0-12,000	0-12,500	0-9,000

*TWO SPEED TRANSMISSIONS: (Optional — Instead of Tor. Conv.)

1) Overdrive Gear Box

2) Underdrive Gear Box

Ratios: 1:1 and 1:1.48

Ratios: 1:1 and 1:0.67

LINE PULLS AND SPEEDS

Drum Pitch Diameter (Inches)	Direct Drive 1.0 to 1.0		Overdrive 1.0 to 1.48		Underdrive 1.0 to 0.67	
	Pull In Lbs.	Speed F.P.M.	Pull In Lbs.	Speed F.P.M.	Pull In Lbs.	Speed F.P.M.
17 1/2	23,300	154	15,700	228	34,600	104
18 1/2	22,000	162	14,800	240	32,800	110

Swing Speed 3.9 R.P.M.

Direct Drive:

Speeds and pulls based on engine operating at full load speed; direct drive.

Torque Converter Drive:

When torque converter is operating at full stall, line pulls are approximately 240 percent of those shown for direct drive.



60-T —TUBULAR BOOM 60 TON TRUCK CRANE

60 TON TRANSIT CRANE (P. C. & S. A. CLASS 12-297)

MAXIMUM ALLOWABLE LOADS — CRANE SERVICE											
Boom Lgth. In Feet	Load Rad. In Feet	Boom Angle In Deg.	Boom Point Pin Hght. (Ft. In.)	Outriggers Set † Load In Pounds		On Tires Load In Pounds		Boom Lgth. In Feet	Load Rad. In Feet	Boom Angle In Deg.	Boom Point Pin Hght. (Ft. In.)
				Over Side	Over Rear	Over Side	Over Rear				
40	10	81	46-6	*120,000	*120,000	*88,000	*94,700	130	30	78	134-3
	12	78	46-0	*120,000	*120,000	*65,300	*72,000		40	74	131-9
	15	74	45-3	*105,000	*105,000	48,200	54,400		50	69	128-6
	20	66	43-6	*81,000	*81,000	32,500	37,400		60	64	124-3
	25	58	41-0	60,300	*65,500	24,300	28,300		70	59	118-9
	30	49	37-3	45,300	51,000	19,300	22,700		80	54	112-3
	35	39	32-0	36,200	40,800	15,900	18,800		90	49	104-6
50	40	25	24-3	30,000	34,000	13,400	16,000		100	42	94-6
	12	80	56-3	*120,000	*120,000	*65,000	*71,700	140	110	35	82-0
	15	77	55-6	*105,000	*105,000	47,900	54,000		120	27	65-6
	20	71	54-3	*81,000	*81,000	32,100	37,000		30	79	144-6
	25	66	52-3	*60,000	*66,000	23,900	28,000		40	75	142-0
	30	58	49-6	45,000	50,800	18,900	22,300		50	70	139-0
	40	43	41-6	29,700	33,700	13,100	15,600		60	66	135-0
	50	23	26-6	21,900	24,000	9,800	11,800		70	61	130-9
60	15	79	65-9	*105,000	*105,000	47,700	53,800	150	80	57	124-6
	20	74	64-8	*80,000	*80,000	32,000	36,900		90	52	117-3
	25	69	63-0	59,900	*65,000	23,800	27,800		100	46	108-9
	30	64	61-0	44,900	*50,000	18,700	22,100		110	40	98-3
	35	58	58-3	35,700	40,400	15,300	18,300		120	34	85-3
	40	53	54-9	29,500	33,500	12,900	15,500	160	30	80	154-6
	50	39	45-3	21,800	24,800	9,600	11,700		40	76	152-6
70	60	21	28-3	17,000	19,500	7,500	9,200		50	72	149-6
	15	81	76-0	*102,500	*102,500	47,500	53,600		60	68	146-0
	20	76	75-0	*79,800	*79,800	31,700	36,600		70	64	141-6
	25	72	73-6	*59,700	*64,500	23,500	27,500		80	60	136-3
	30	68	71-9	44,700	50,400	18,500	21,800		90	55	129-9
	40	59	66-9	29,300	33,300	12,700	15,200		100	50	122-3
	50	48	59-6	21,500	24,600	9,400	11,400	170	110	45	113-0
80	60	36	48-9	16,800	19,300	7,200	9,000		120	39	102-0
	20	78	85-3	*79,500	*79,500	31,400	36,300		30	80	164-9
	25	74	84-0	*59,500	*63,500	23,200	27,200		40	76	162-9
	30	71	82-6	44,500	49,500	18,200	21,600		50	73	160-0
	40	63	78-3	29,100	33,000	12,400	14,900		60	69	156-9
	50	54	72-3	21,300	24,300	9,100	11,100		70	65	152-6
	60	45	64-0	16,500	19,000	7,000	8,700	180	80	61	147-6
90	70	34	52-0	13,400	15,400	5,500	7,000		90	57	141-9
	80	18	31-9	11,100	12,900	4,500	5,700		100	53	134-9
	20	80	95-6	*79,000	*79,000	31,200	36,100		110	48	126-9
	25	77	94-6	*59,000	*60,500	23,000	27,000		120	43	117-0
	30	73	93-0	44,400	49,500	18,000	21,400	190	30	80	176-9
	40	66	89-3	28,900	32,900	12,200	14,700		40	76	174-9
	50	59	84-3	21,100	24,100	8,900	10,900		50	72	172-9
100	60	52	77-3	16,300	18,800	6,750	8,450		60	69	168-9
	70	43	68-0	13,200	15,300	5,300	6,750		70	65	164-6
	80	32	55-0	10,900	12,700	4,200	5,500		80	61	159-6
	25	77	104-6	*57,500	*57,500	22,800	26,800		90	57	154-6
	30	75	103-6	44,200	*49,000	17,800	21,100		100	53	149-6
	40	69	100-0	28,700	32,700	11,900	14,500		110	48	144-6
	50	62	95-6	20,900	23,800	8,700	10,700	200	120	43	139-6
110	60	56	89-9	16,100	18,500	6,600	8,200		30	80	186-9
	70	48	82-0	13,000	15,000	5,200	6,500		40	76	184-9
	80	40	71-9	10,700	12,500	4,100	5,300		50	72	182-9
	90	30	57-9	9,000	10,500	3,300	4,300		60	69	178-9
	25	79	114-9	*52,000	*52,000	22,600	26,500		70	65	174-6
	30	76	113-9	*43,900	*45,000	17,500	20,900		80	61	169-6
	40	71	110-9	28,500	32,500	11,700	14,200	210	90	57	164-6
120	50	65	106-9	20,600	23,700	8,400	10,400		100	53	159-6
	60	59	101-6	15,900	18,400	6,300	8,000		110	48	154-6
	70	53	95-0	12,700	14,800	4,800	6,250		120	43	149-6
	80	46	86-6	10,500	12,300	3,700	5,000		30	80	194-9
	90	39	75-6	8,700	10,300	2,900	4,000		40	76	192-9
	100	30	60-6	7,400	8,800	2,250	3,250		50	72	190-9
	25	80	125-0	*45,200	*45,200	21,800	26,300	220	60	69	186-9
130	30	77	124-0	*42,000	*42,000	16,900	20,600		70	65	182-6
	40	72	121-3	28,300	32,300	12,200	14,000		80	61	177-6
	50	67	117-9	20,500	23,500	8,000	10,200		90	57	172-6
	60	62	113-0	15,700	18,200	5,900	7,800		100	53	167-6
	70	56	107-0	12,600	14,600	4,500	6,050		110	48	162-6
	80	50	99-9	10,300	12,000	3,400	4,800		120	43	157-6
	90	44	90-6	8,550	10,100	2,600	3,850	230	30	80	204-9
140	100	36	78-9	7,200	8,600	1,950	3,050		40	76	202-9
	110	28	63-0	6,100	7,400	1,400	2,450		50	72	200-9

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CRANE SERVICE

Load Ratings are based on freely suspended loads with machine leveled and standing on a firm, uniform supporting surface. Practical working loads depend on supporting ground, the effect of shock or side loading, wind and other factors affecting stability, hazardous surroundings, experience of personnel and proper handling, all of which must be taken into account by the operator.

Operating Radius is the horizontal distance from the axis of rotation before loading, to the center of the vertical hoist line or tackle with load applied.

Load Ratings "Outriggers Set" are based on outriggers fully extended and set to a distance of 18 feet 8 inches between the centerline of the float connections. All wheels shall be relieved of all weight.

Load Ratings "On Tires" depend on tire capacity, condition of tires, and tire air pressure. Load Ratings are based on crane components and conditions shown under MACHINE EQUIPMENT. Weights of hooks, hook blocks, slings, jibs, and all other load handling devices, except the hoist rope, shall be considered part of the load.

RECOMMENDED HOIST TACKLE

Loads over	20,000 lbs.	40,000 lbs.	60,000 lbs.
Parts of line	2	3	4
		80,000 lbs.	100,000 lbs.
		5	6

The maximum allowable load for a single part line on the auxiliary hoist is 13,000 lbs.

LOAD RATING DEDUCT DATA

Deduct weight of optional equipment from crane load rating.

Jibs (when lifting over main boom with jib attached):

Tubular Jib

20 ft. —	900 lbs.	40 ft. —	1200 lbs.
30 ft. —	1000 lbs.	50 ft. —	1500 lbs.

LIMITATIONS

Mast and pendant suspension required on all booms. Intermediate suspension required on booms 140 ft. and longer.

Booms can be raised to a maximum angle of 82 degrees.

Maximum booms that can be lifted off the ground unassisted are:

Boom	With Outriggers	Without Outriggers
Over Side	160 ft.	120 ft.
Over Rear	160 ft.	120 ft.

Maximum boom-jib combination that can be lifted off the ground unassisted are:

Boom plus Jib	With Outriggers	Without Outriggers
Over Side	140 ft. + 50 ft.	100 ft. + 50 ft.
Over Rear	160 ft. + 50 ft.	120 ft. + 50 ft.

Maximum boom that can be carried, below the cab height, to the rear when traveling is 80 ft.

Maximum boom-jib combination that can be carried in a lowered position (15 ft. 6 in. to top of jib mast) is 80 ft. of boom plus 50 ft. jib.

Tire pressure shall not be less than 85 psi when lifting loads "On Tires".

MACHINE EQUIPMENT

-Alloy steel tubular boom.

17 ft. 6 in. mast.

13,800 lbs. outside counterweight.

(8 x 4) 11 ft. wide carrier.

Hydraulic outriggers with 18 ft. 8 in. spread (outrigger beams fully extended).

3/8 in. diameter main hoist cable — 79,600 lbs. breaking strength.

3/4 in. diameter auxiliary hoist cable — 58,800 lbs. breaking strength.

*Maximum Allowable Crane Loads are limited by factors other than tipping.

†Outriggers Set — Maximum Allowable Crane Loads are those loads which can be lifted within the included angles between the outrigger supports when beams are fully extended, as shown in quadrant diagram "Outriggers Set" (see page 7). DO NOT lift or swing any loads within the included angle between the front outrigger supports designated over front.

On Tires — maximum allowable crane loads are those loads which can be lifted within the areas as shown in the quadrant diagram "On Tires" (see page 7). DO NOT lift or swing any loads within the included angle designated over front.

Maximum allowable loads are in accordance with PCSA Standard #1.



60-T SERIES FOUR 60 TON TRUCK CRANE

MAXIMUM ALLOWABLE LOADS (LBS.) — TUBULAR BOOM — TUBULAR JIB													
Boom Length In Feet	Boom Angle In Degrees	Jib Length (in Feet) and Offset (in Degrees)†											
		20 Ft. Jib			30 Ft. Jib			40 Ft. Jib			50 Ft. Jib		
		0°	15°	30°	0°	15°	30°	0°	15°	30°	0°	15°	30°
40 to 100	82	20,000	20,000	12,000	16,000	14,000	7,000	16,000	10,000	5,000	14,000	8,000	3,000
	78	20,000	20,000	12,000	16,000	12,000	7,000	16,000	10,000	5,000	14,000	8,000	3,000
	74	20,000	18,000	12,000	16,000	12,000	6,000	16,000	9,000	5,000	13,000	6,000	3,000
	72	20,000	17,000	11,000	16,000	10,000	6,000	14,000	8,000	4,000	12,000	5,000	3,000
	70	18,000	16,000	10,000	14,000	10,000	6,000	12,000	7,000	4,000	10,000	5,000	3,000
	68	17,000	15,000	10,000	12,000	10,000	6,000	12,000	7,000	4,000	10,000	5,000	3,000
	66	16,000	14,000	10,000	10,000	9,000	6,000	10,000	6,000	4,000	8,000	4,000	3,000
	64	15,000	14,000	10,000	10,000	9,000	6,000	10,000	6,000	4,000	8,000	4,000	3,000
	62	13,000	12,000	10,000	9,000	8,000	6,000	8,000	5,000	4,000	6,000	4,000	3,000
	60	12,000	12,000	10,000	9,000	8,000	6,000	8,000	5,000	4,000	6,000	4,000	3,000
	50	10,000	10,000	8,000	8,000	6,000	5,000	7,000	4,000	3,500	5,000	3,500	—
	40	8,000	8,000	7,000	6,000	5,000	5,000	5,000	—	—	4,000	—	—
	30	6,000	6,000	6,000	—	—	—	—	—	—	—	—	—
110 to 160	82	16,000	16,000	12,000	14,000	12,000	6,000	10,000	8,000	4,500	5,000	4,000	3,000
	78	14,000	14,000	12,000	14,000	12,000	6,000	10,000	8,000	4,500	5,000	4,000	3,000
	74	13,000	13,000	12,000	12,000	12,000	6,000	10,000	7,000	4,500	5,000	4,000	3,000
	72	12,000	12,000	11,000	10,000	10,000	6,000	9,000	7,000	4,500	5,000	4,000	3,000
	70	11,000	11,000	10,000	8,000	8,000	6,000	8,000	6,000	4,500	5,000	4,000	3,000
	68	10,000	10,000	10,000	8,000	8,000	6,000	7,000	6,000	4,500	5,000	4,000	3,000
	66	8,000	8,000	8,000	7,000	7,000	6,000	6,000	5,000	4,000	5,000	3,000	—
	64	8,000	8,000	8,000	7,000	7,000	6,000	6,000	5,000	4,000	4,000	3,000	—
	62	6,000	6,000	6,000	6,000	6,000	6,000	5,000	4,500	4,000	4,000	3,000	—
	60	6,000	6,000	6,000	6,000	6,000	6,000	5,000	4,500	4,000	4,000	3,000	—
	50	5,000	4,000	—	5,000	4,000	—	—	—	—	—	—	—

The above jib ratings are based on factors other than tipping, and do not exceed 75% tipping.
Maximum offset (angular) from centerline of boom to centerline of jib.

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JIB SERVICE

Allowable loads shown in table are for general jib service with machine level and standing on hard level supporting surface on fully extended outriggers. Allowable loads are the same "over the side" and "over the rear" at any specified boom angle. Loads must be freely suspended. Weights of hooks, hook blocks, slings, cables, and all other load handling devices, except the hoist rope, shall be considered part of the load. Proper care must be exercised by the operator at all times to avoid shock and side loadings on the boom and jib. Loads apply only to machines having booms and jibs in first class condition built and recommended by Bucyrus-Erie Company. Mast and multiple pendant

suspension required on all booms. Intermediate suspension required on booms of 140 feet and longer. Booms can be raised to a maximum boom angle of 82 degrees.

Load ratings shown on this chart makes no allowances for such factors as the effect of freely falling and side loads, wind, ground conditions, and operating speeds. Loads shall be reduced to take these conditions into account.

RECOMMENDED JIB HOIST TACKLE

Loads over 13,000 pounds require two parts of line. Deduct weight of hook blocks, hooks and slings from allowable load.

WARNING: The information contained in this specification is to be used only as a guide in evaluating the performance of a machine. For operation of a machine always refer to the capacity plate on the machine (since this specification may apply to a different model or series).